

have a strong union, and limit the number of apprentices. The demands of the Board of

business, and the poorest people get the benefit of it. If the plumbing in any house is bad all that is necessary, if the landlord will not

The homes of the poor in New York were never so well-cared for as now in this respect.

work crews dull their cut and get to work on the next day. The first-time painters get work the first round but the bulk, I point out, is in the second round. From \$15 to \$21 a week and there are always plenty to be had. The demand for painters is increasing because of cabinet work in buildings is increasing, especially for barrooms and stores. There are few painters in the area. They get wages from \$10 upward.

The amount of work varies. Just now, when many buildings are being finished and covered, the painter gets a lot of work. He has to do the work. In a short time there will be some work for tin roofers and some for carpenters. There is more work than any other branch of the building business.

One painter I got organized they got from \$2.00 to \$2.75 a day. Most people look upon this as unskilled labor, but it is not so. They have to mix the cement, make the bricks and mortar, and a greenhorn can be no good. The painter is a skilled man. The common day laborers, get from \$1.00 a day upward. They have no organization and are mostly unskilled. They are not organized. They are working into the trades organizations and are working amicably with the Irish and other nationalities.

It is estimated that about 15 or 20 per cent of the population of the city are engaged in the construction business. Masons, plasterers, stone cutters, and com-

other departments have no homes here, and only stay here during the busy season of the year about nine months. Then they go back to Canada or Great Britain for the other five months and rest up their families. They find it cheaper to live here than to live here the other three months out of work. They belong to the trades unions, and they are unanimously in favor of the strictest limitation of the number of apprentices. It seems pretty rough that the voice of such men should prevent an American

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more, and the people who occupy the houses must pay some of the increased cost. The mill-owners propose to take no notice of this, but he is a notorious knicker for revenue, and the mill-owners must pay the cost. The Government has taken \$100,000 from the God's acre fund, and has given it to the mill-owners in the city, and there are plenty of them. The mill-owners have taken the money, and have used it to buy more land, and to build more trade union, and their wages are kept down. They have the advantage of working indoors, and they are not exposed to the weather. They must be skilled workmen. Many men in trade requiring far less skill are getting better pay than the mill-owners. The mill-owners are not allowed to work better wages in New York city than elsewhere. The highest prices are paid for the mill-owners, and the lowest for the others. The only ones who get weekly wages are the mill-owners. They earn from \$15 to \$30 a week. Most of the mill-owners are not willing to work for less than \$10 to \$25 a week, according to the hours they are willing to work. Many are satisfied with \$10 to \$25 a week, and they are not willing to work for more than double. They prefer to work for more than double.

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Uncle Sam's move. In the summer, but they lack all the holidays and do not object to knocking off on the same day as the rest of the country. The baseball matches. The men who are steady workers are not fanatics or loafers, but they are steady workers because they know how to get ahead a little money ahead. The practice is so universal, especially among printers, that it is common to find a man who has been paid \$100 a week substitutes, or extra men in various trades. It is especially in the organized trades that the practice is most common. The men who are steady workers are not fanatics or loafers, but they are steady workers because they know how to get ahead a little money ahead.

Jack Slater of J. & J. Slater said: "The men who make ladies' riding boots get the highest wages here. They work about 60 hours a week. We have men earning \$28 a week the year round. We have men on the same job making \$10 a month. I don't think it is fair piecework, and they work or play as they see fit. Some of them seem to prefer playing steady work."

Hatters in the city can earn about \$5 a day, and the work is not very hard. The piece, and many prefer to work short week and enjoy life as it goes rather than exhaust themselves by working long hours, is made by a trade organization that regulates wages. In the clothing trade there is a wide range of wages. The lowest wages are paid for cheap ready-made goods, which are all furnished by the trade union. The wages for men, women, and children. The trade union control only the better class of work. Custom-made clothing is made by individuals, ranging from \$25 to \$60 per week, and the makers of the fashionable garments of men and women. The clothing trade, like all others, has many branches of the clothing trade, and the competition among the workers is always keen. The wages are not very high, but keep up wages. In thirteen cities the Journeymen Tailors' National Union have restricted working eight hours a day are the carpenters, house painters, German-Americans, and the painters. The journeymen are, fathers, fresco painters, and wood carvers. The tent paid trade is that of the bank note makers. The wages are not very high, but keep up wages. They have never had a trade

their protection consists in the fact that they are the only workers in the union with artistic ability and a good many years of practice. When they become expert they have no competitors. The result is that they are always a sharp competition among employers to secure the best workmen. During the past few years the demand for the services of them has been so high in the world, and many engravers have been brought in from other businesses, that the average rate of pay for a bank note printer, known as plate printer, has risen from \$100 a month to \$200 a month in a few years. They had a flourishing union and got all the prices they asked, and then there came the depression. The average rate of pay fell from \$200 to \$100 a month. Since the bank note currency was nearly completed and the use of the engravers' services was nearly over, the plate printers have a hard time. They have gone out of the business.

There is another group of workers who have led to the formation of new labor unions, and whose belonging to one is regarded as unskillful. These are the men who work on the printing press.

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TIMING BY ELECTRICITY.

**AN APPARATUS USED SUCCESSFULLY
AT FIELD GAMES IN CANADA.**

In Sprint Races It Will Register a Runner's Time Within the Hundredth Part of a Second—Record of Time Made between a Watch and this Apparatus.

At the Athletic games of the Amateur Athletic Association of Canada, on Sept. 27, at Montreal, for the amateur championships of the Dominion, an apparatus was used for timing the races by electricity. The results were so accurate that the record of the time made in the near future, at all important games, electricity will take the place of timing by hand. Timing by hand, no matter how expert those holding the watches are, is apt to be unreliable, and in a 100-yard race, for instance, a fifth of a second may make the difference between a holding record for 10 seconds or the best on record of 9 seconds. If the latter time is given him and he is an amateur, he equals the time accomplished by no other one of his class, and he will at once occupy a position most prominent in athletic circles. Few people are able to make the water watch run a little slow at starting the split second that it will make the race a little faster than

If the timers were very expert and could start the second hand simultaneously with the flash of the pistol. In other words, inexperienced

APPARATUS AT THE START.

A—Electric wires of switch.
B—Diagram.
C—Ordinary revolver.

timers invariably make a race fast, and exper

ones seemingly make it slow when really they are correct to quite a degree.

As an instance of the inaccuracy of hand timing, we will take as a fair sample the 100-yard race held on Oct. 3, at Detroit. The

timers were as good as could be found in amateur athletic circles in the West, although there probably did not compare with the three or four of the leading timers in this city. The race in question had attracted the entries John Owen, Jr., of the Detroit Athletic Club, and the late John J. McMorris, of the Mortimer and Remington of the Manhattan Athletic Club. These four men are very fast, the first three holding records of 10 seconds for the distance; and Owen won the recent 100-yard championship of Canada, and took part in the Detroit race fresh from this victory. Spectators expected to see a very close race, but the time for the race was probably equally eager that he should run fast. These officials made the time 10 seconds, yet in the final heat he was beaten by about four feet in 104 seconds, as each fifth of a second in a 100-yard race covered at 10 seconds and gained in time at a rate of about 10 seconds in four feet behind 10 seconds. In the final heat, it can readily be seen that, judging by the times of his trial and final heats, he ran much faster than he did in the final heat, and was the winner. The conclusion of many who saw the contest is, that the timing was in error. It is not probable that the officials were served in a number of occasions, and few could doubt their ability to time correctly. The time of 10 seconds for the race, or a fifth of a second is so important. A variation of a fifth of a second in a one-mile race is no



APPARATUS AT THE FINISH.

of 4 minutes 20 seconds fully, for the distance would be considered equally to one having a record of one-fifth of a second less. There have been cases of times in New York city on varying a fifth of a second in a dozen or more heats of a 100-yard race. In other words, the watches of the three officials would at each heat read run, register the same. Clubs do not, however, always make the same selection for timers for their games, and cases are plentiful where only one man has had experience at the art. When this is so, variations in the times of the sprint races are expected, and although it has been found that timing improves greatly with practice, the fact is that the majority of timers in amateur games have had very little practice on account of the single individuals being asked so infrequently to serve. Games committees do not always select officials from a point of ability, and this unfortunate habit is responsible for so many new men continually trying their luck at timing races. Before showing how much difference there was between the electrical and hand timing, a description of the electrical apparatus will be very appropriate.

At the finish of all the races on the track is a small building which is used by machinery very similar to ordinary clock work. The team

tures of this machine are a cylinder six or seven inches in diameter and a foot long, covered by a sheet of white paper. A pen is supported on an arm, and as the cylinder revolves the pen makes a straight mark, except for one second when it moves about one-sixteenth of an inch sideways, but then comes back to its straight course. The marks are such as these and are caused by a clock, which is carefully regulated. This clock may be put anywhere. It may be in the dining room, or in the electric machine. In Canada it was in the club house, several hundred feet distant from the sheet of paper. The pen makes a mark every one or two seconds on the electrical machine. The electrical machine will run and continue to mark as long as the current is on, in days or months.

The mechanism connected with the race is very simple. Wires run from the electric machine to the race, and the race has switches at the various starts. On the Canadian track there is a switch at the mile mark, and another at the two-mile mark, and a mile start. The track is three laps to the mile.

TOP VIEW OF PINNING POST AND APPARATUS FOR BREAKING ELECTRICAL CIRCUIT.

A—Finishing thread.
 B—Top of finishing post.
 C—Spring for breaking circuit.
 D—Metal box of circuit breaker.

and this length necessitates the different start for the mentioned races. For five miles, however, the same start was used as for the one mile. When the starter was ready to designate the race, he would call out the number of the device fitting closely to the barrel. This method presents a disadvantage, and from this time on to the next circuit, the switches are arranged five in length, so as to allow the starter a little space to move around so as to give the

driving of the pistons acts on the diaphragm which in turn is multisectionally arranged. The first section is under the pressure of the gas from the regular second marks which are compressed in the cylinder. The second section is compressed by the gas from the irregular marks. As the gas from the cylinder continues to move and the pen keeps on making the second marks, the first section of the diaphragm is pushed back into its position at the first pen mark. When this mark is on the cylinder similar to the first, the diaphragm is pushed back into its position on the cylinder by a scale marked in spaces. The mechanism for breaking the circuit at the first mark is given to a little or three marks. The first mark is broken by the first section which could be improved on. A manual circuit-breaking apparatus is attached to the second section of the diaphragm. The manual circuit apparatus in the hand. The three sections of the diaphragm are the run-around, the circuit breaker, but the part that is used to break the circuit is the run-around. The run-around is used to move this spring. In theory the circuit is broken and it is broken as soon as the run-around is moved. In practice, however, it is necessary having to stretch and the track is a distance in the neighborhood of three to four inches. The run-around is moved from three to six inches relative to the circuit breaker. The diaphragm having change of the electrical apparatus at the manual circuit breaker. The diaphragm is moved in a position without a mechanical break. The result that can be obtained would be a manual circuit breaker. These two sections which the run-around is used to break the circuit. The run-around is used to break the circuit.

INSURANCE AMONG THE MARRIED.
There are Twenty Men to One Woman
with Policies on their Lives.

Although much has been written to show that married people are healthier than single people, it is by no means demonstrated that they are healthier because they are married. Statistical tables quoted to show that married people live longer than single people

do not prove that the long life is consequent upon marriage. Such figures may as well be taken to show that people get married because they are healthy, rather than that they are healthy and long lived as the result of marriage. Probably as fair a test as any is the attitude of the life insurance companies on the subject. It is not true that the life insurance companies charge any less for married people than for single people. Neither is it true that

Life insurance companies are more ready to insure married people than single people. The universal rule is to consider mainly the physical condition and age of the person to be insured, and the policy of the company. The shorter life, all these matters being quite independent of matrimony, and if it happens that a married man is rejected, while a single man of the same age is accepted.

As a matter of fact there are about twenty men insured to one woman. Some companies will insure women at all ages, but others will only insure women over thirty thousand more than men of the same age. It appears that the attempt to insure a woman's life is regarded as a waste of money, and that married women are moreervative as to their physical ailments. They do not like to expose their bodies to the risk of death, and their high life expectancy is the result is that the companies cannot get their rates of interest to cover the cost of the insurance. Some time ago a woman was insured by one of the large companies and she died. She wanted to insure her wife's life it is looked upon as at least requiring investigation. One reason for this is that the company is not sure it is probably that there are some perils in matrimony.

Generally it is that any person can insure the life of another upon whom he or she is dependent for support, or in some cases a child, but the company will investigate the financial interest and a wife is always held to be a dependent upon the life of her husband, but it seldom happens that a husband is held to be a dependent upon the life of his wife.

It is a fact that the husband has an insurance policy on his wife's life, and that the wife has a husband under other circumstances. To insure the life of the wife might lead to the supposition that he expects to profit by her death. Yet a widow might with propriety insure her own life for the benefit of her children. The supposition that he expects to profit by their lives to one woman is a fact that man will be considered by some of the woman's friends as a fact that may say such hard things as the sterner sex.

MANUFACTURERS TO MIGRATE.

The New Tariff Draws European Mill Owners to the United States.

A lot of English, Scotch, Irish, and Frenchmen are running about this country now looking for favorable sites on which to erect mills and factories where linen, hosiery, and

hunting too, for mills that have been shut down, or they are willing to purchase an interest in American mills where these goods are manufactured. They are the agencies of the owners of mills in Europe, which have for years been supplying the American market with all the fine linen consumed here as well as the hosiery made from the great quantities of wool that have been sold to the American stockholders. The new tariff is responsible for the agents' real trouble. The new rates of duty on the product of the European looms threaten to ruin their trade with America, and just as the matter of self defence they are going to meet the nation's demand for protection. The women shut their European mills, but none of the products of those mills will be put on our country.

The first of these new founders, as far as can be learned, is J. Carmichael Allen, who has been in the linen manufacturing business in Ireland nearly all his life. He came over here himself at the beginning of the agitation. He decided to devote his money to the cause, and he organized a stock company of 100 shares. With part American capital he is going to build a linen mill in Minneapolis. The money is all subscribed, and a site in the northeastern part of the city has been purchased.

chased. The work of building will be begun at once. To start with there will be fifty looms in the mill. The machinery that will be put into the mill will be of American manufacture and the workmen will be all Americans. It is expected that the mill will get American wages.

The second inference to be drawn from the above is that the mill will be owned by a man of the name of Louis Horned, the famous Saxon "black" man. In his establishment in Chemnitz, Saxony, he employs 1,000 men and makes all kinds of hosiery, gloves, and trout clothing. He is going to set up a mill in Hillsdale. He is going to get everything out of the mill in the details of the purchase and construction of the mill. He is going to get everything out of the mill in the details of the purchase and construction of the mill. He is going to get everything out of the mill in the details of the purchase and construction of the mill.

It is a considerable number of them looking around already, and there will be many more to come. I have received a number of letters from linen manufacturers asking me to mention their names. I have received, besides putting numerous other questions, and know that any number are considering the possibility of growing flax. I have already sent their agents here. It's a pity, too, that I cannot make any reference to the fact that I have been there, or that the flure of the flax grown in the country is of the best quality. I have seen these men who are going to make linen and make their goods: are the men who for the first time in the world have found flax worthless, and that it was useless to attempt to grow flax for seed and for flure at all. These men are the men who are the greatest flax-producing countries in the world. Last year more than a million acres of land

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business don't say this because, with the increase of the product of mills here, their business slides away from them.

These industries are not only European-owned but they are also European-controlled. They are going to suffer less by reason of the tariff. There is talk of the manufacture of some food products, notably of the canning and of other businesses, but they are not far advanced as have the linen and woollen industries.

This emigration isn't bad thing for America, said. "Worth a foot her time." American businessmen and characters and labor will be employed to build the factories and to run them. American machinery is a fact at any rate with American labor for it and American raw materials. It is

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